FIG.1

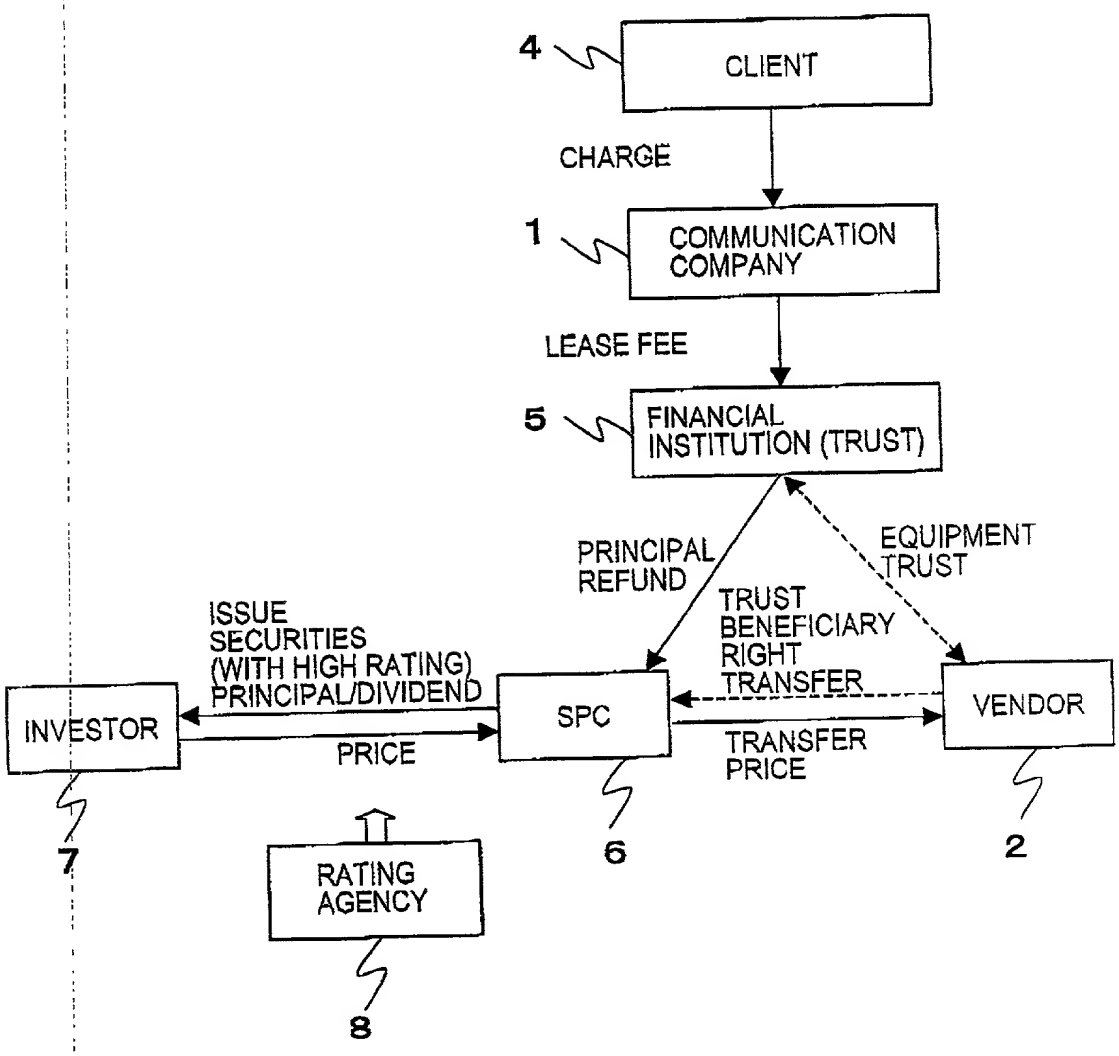

4
CLIENT
CHARGE
1
COMMUNICATION COMPANY
LEASE FEE
5
FINANCIAL INSTITUTION (TRUST)
PRINCIPAL REFUND
EQUIPMENT TRUST
TRUST BENEFICIARY RIGHT TRANSFER
ISSUE SECURITIES (WITH HIGH RATING) PRINCIPAL/DIVIDEND
INVESTOR
PRICE
SPC
TRANSFER PRICE
VENDOR
7
RATING AGENCY
6
2
8

FIG.2

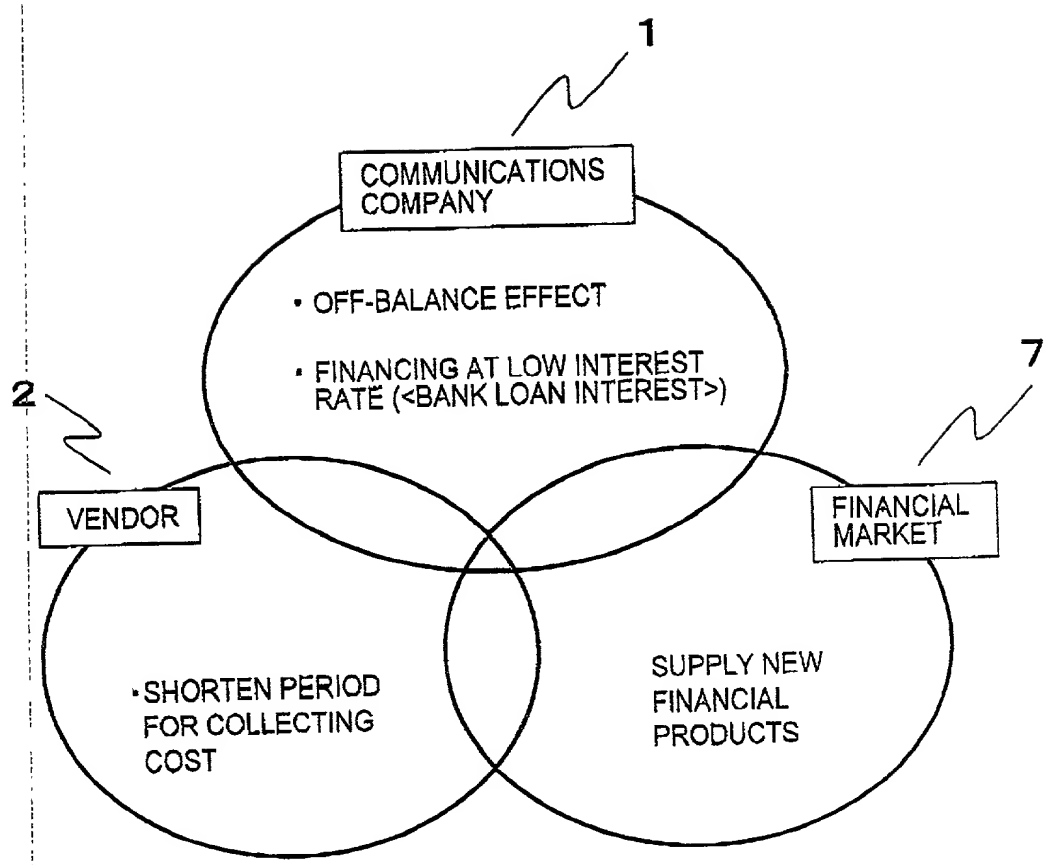

1
COMMUNICATIONS COMPANY
• OFF-BALANCE EFFECT
• FINANCING AT LOW INTEREST RATE (<BANK LOAN INTEREST>)
2
VENDOR
7
FINANCIAL MARKET
• SHORTEN PERIOD FOR COLLECTING COST
SUPPLY NEW FINANCIAL PRODUCTS

FIG.3

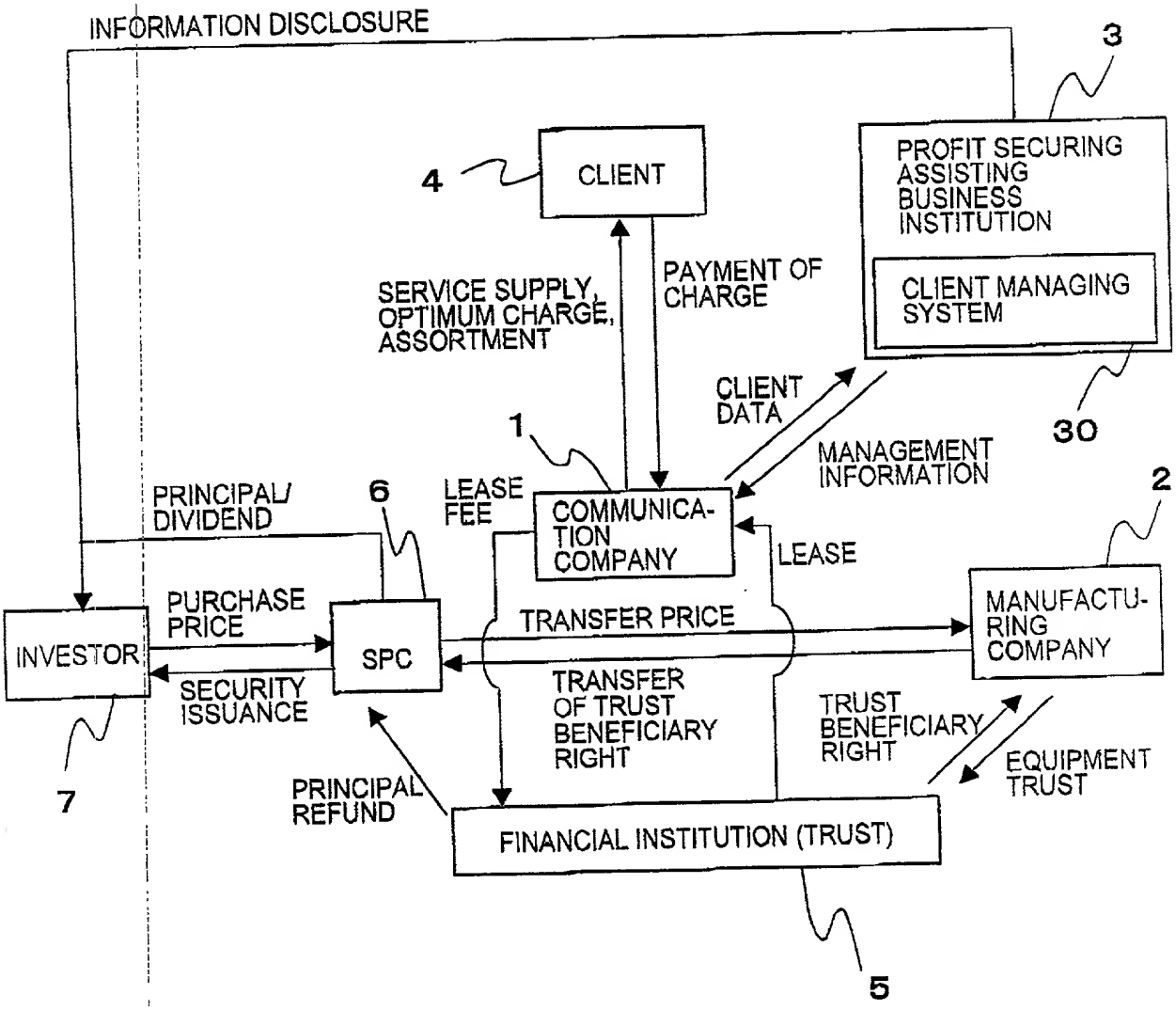

INFORMATION DISCLOSURE
3
4
CLIENT
PROFIT SECURING ASSISTING BUSINESS INSTITUTION
CLIENT MANAGING SYSTEM
SERVICE SUPPLY, OPTIMUM CHARGE, ASSORTMENT
PAYMENT OF CHARGE
CLIENT DATA
MANAGEMENT INFORMATION
30
1
PRINCIPAL/ DIVIDEND
6
LEASE FEE
COMMUNICA-TION COMPANY
LEASE
2
PURCHASE PRICE
TRANSFER PRICE
INVESTOR
SPC
MANUFACTU-RING COMPANY
SECURITY ISSUANCE
TRANSFER OF TRUST BENEFICIARY RIGHT
TRUST BENEFICIARY RIGHT
EQUIPMENT TRUST
7
PRINCIPAL REFUND
FINANCIAL INSTITUTION (TRUST)
5

FIG.4

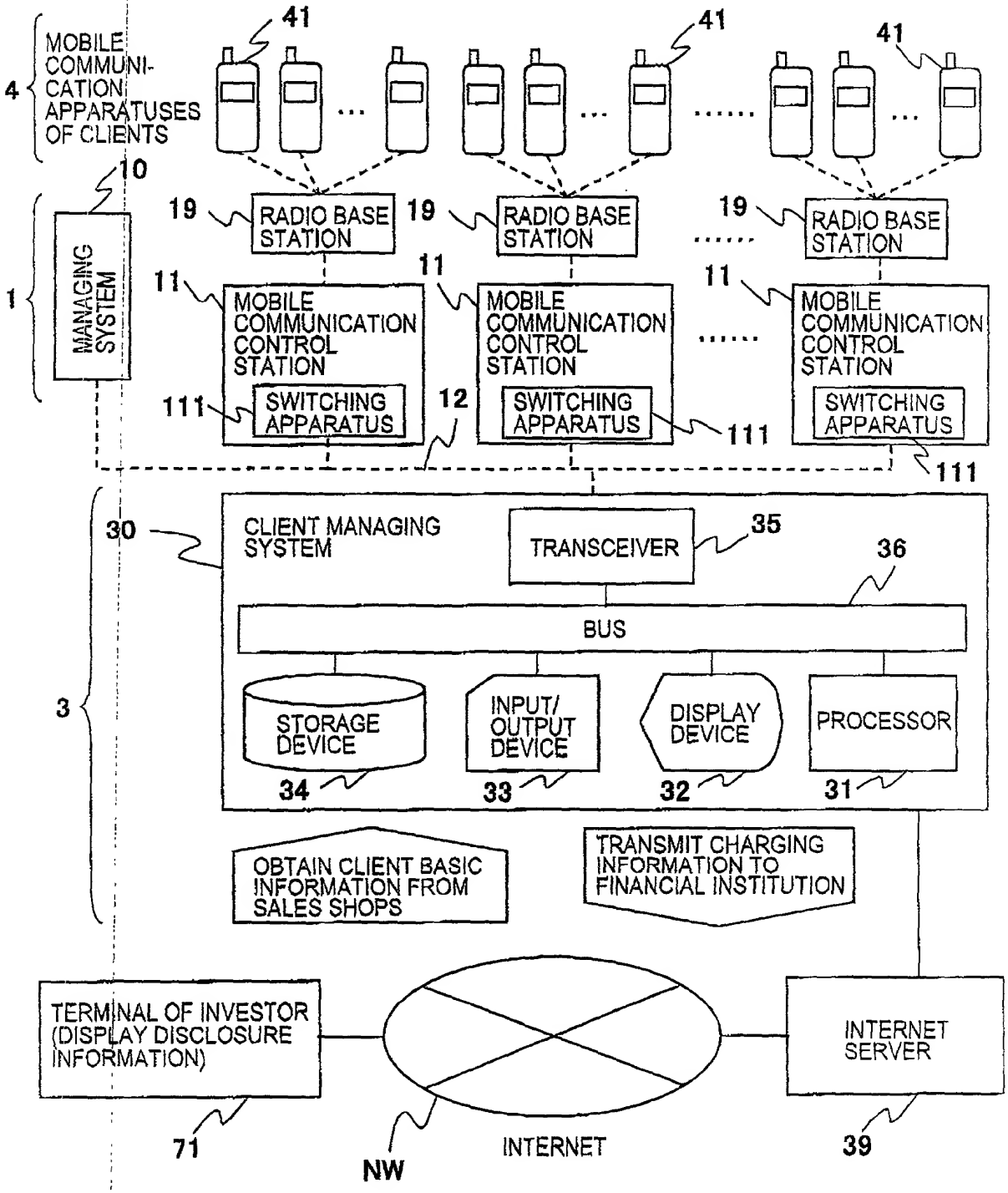

MOBILE COMMUNI-CATION APPARATUSES OF CLIENTS
4
41
41
41
10
MANAGING SYSTEM
1
19
RADIO BASE STATION
19
RADIO BASE STATION
19
RADIO BASE STATION
11
MOBILE COMMUNICATION CONTROL STATION
11
MOBILE COMMUNICATION CONTROL STATION
11
MOBILE COMMUNICATION CONTROL STATION
111
SWITCHING APPARATUS
12
SWITCHING APPARATUS
111
SWITCHING APPARATUS
111
30
CLIENT MANAGING SYSTEM
TRANSCEIVER
35
36
BUS
3
STORAGE DEVICE
34
INPUT/ OUTPUT DEVICE
33
DISPLAY DEVICE
32
PROCESSOR
31
OBTAIN CLIENT BASIC INFORMATION FROM SALES SHOPS
TRANSMIT CHARGING INFORMATION TO FINANCIAL INSTITUTION
TERMINAL OF INVESTOR (DISPLAY DISCLOSURE INFORMATION)
71
NW
INTERNET
INTERNET SERVER
39

FIG.5

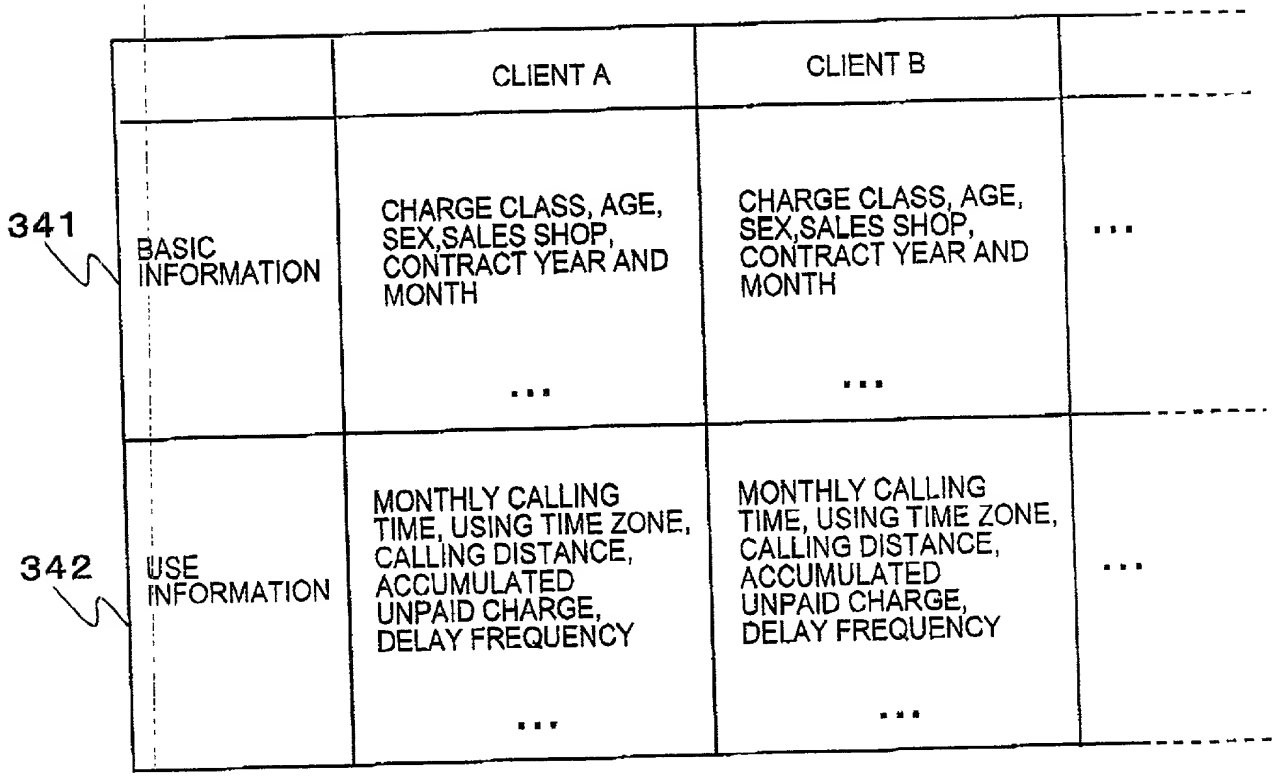

341
342
CLIENT A
CLIENT B
BASIC INFORMATION
CHARGE CLASS, AGE, SEX,SALES SHOP, CONTRACT YEAR AND MONTH
CHARGE CLASS, AGE, SEX,SALES SHOP, CONTRACT YEAR AND MONTH
USE INFORMATION
MONTHLY CALLING TIME, USING TIME ZONE, CALLING DISTANCE, ACCUMULATED UNPAID CHARGE, DELAY FREQUENCY
MONTHLY CALLING TIME, USING TIME ZONE, CALLING DISTANCE, ACCUMULATED UNPAID CHARGE, DELAY FREQUENCY

FIG.6

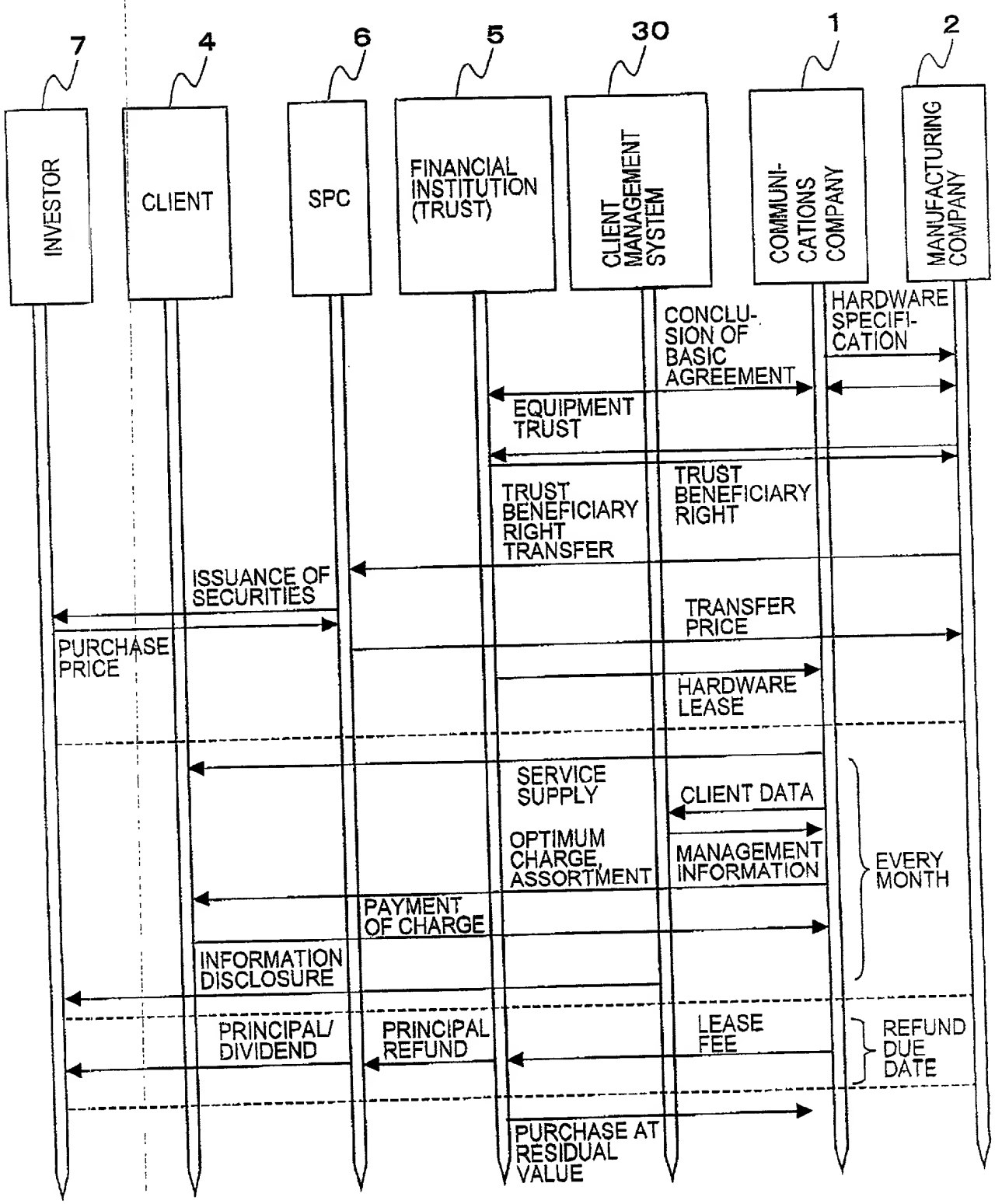

7
4
6
5
30
1
2
INVESTOR
CLIENT
SPC
FINANCIAL INSTITUTION (TRUST)
CLIENT MANAGEMENT SYSTEM
COMMUNI-CATIONS COMPANY
MANUFACTURING COMPANY
CONCLU-SION OF BASIC AGREEMENT
HARDWARE SPECIFI-CATION
EQUIPMENT TRUST
TRUST BENEFICIARY RIGHT TRANSFER
TRUST BENEFICIARY RIGHT
ISSUANCE OF SECURITIES
PURCHASE PRICE
TRANSFER PRICE
HARDWARE LEASE
SERVICE SUPPLY
OPTIMUM CHARGE, ASSORTMENT
CLIENT DATA
MANAGEMENT INFORMATION
EVERY MONTH
PAYMENT OF CHARGE
INFORMATION DISCLOSURE
PRINCIPAL/ DIVIDEND
PRINCIPAL REFUND
LEASE FEE
REFUND DUE DATE
PURCHASE AT RESIDUAL VALUE

FIG.7

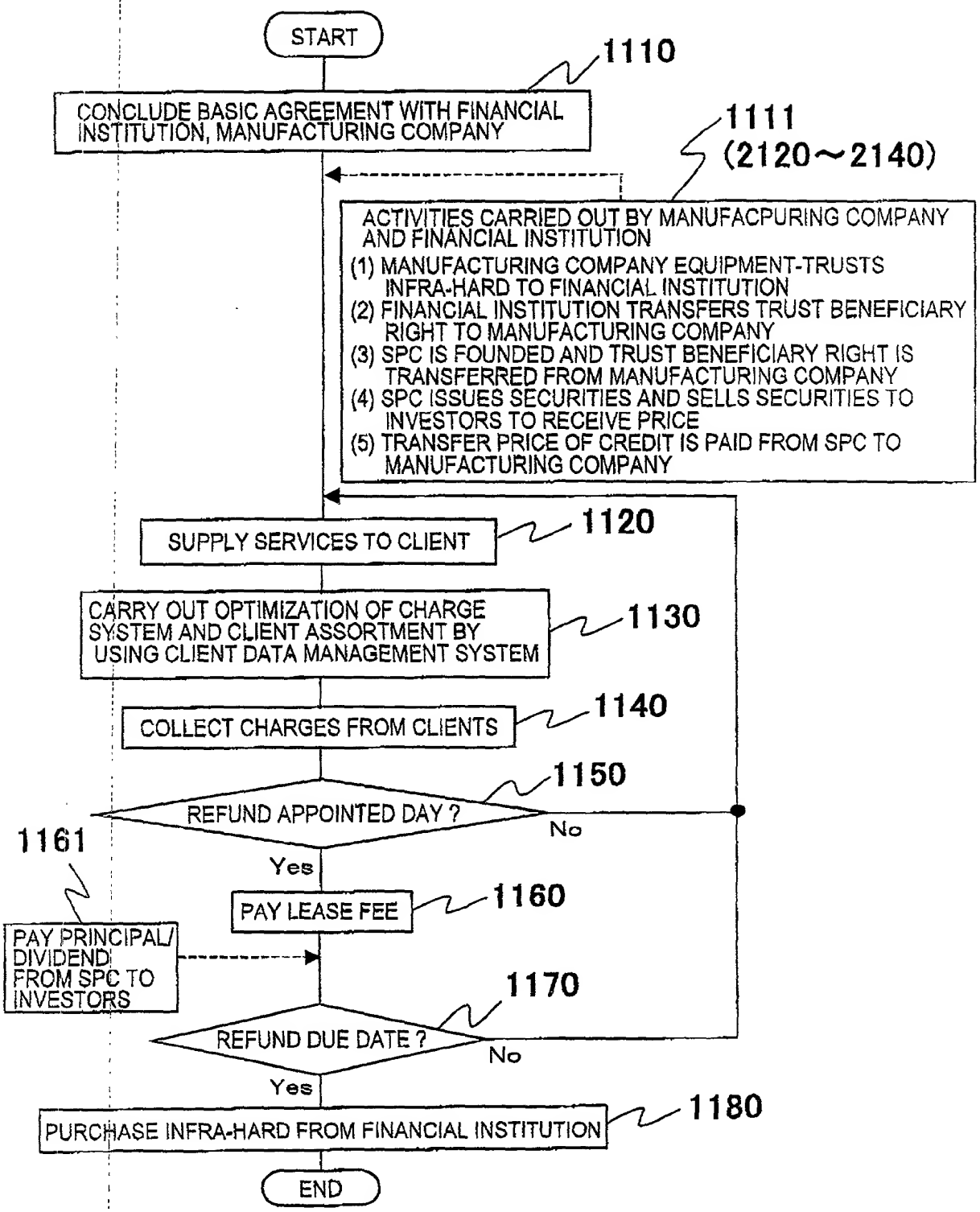

START
1110
CONCLUDE BASIC AGREEMENT WITH FINANCIAL INSTITUTION, MANUFACTURING COMPANY
1111
(2120～2140)
ACTIVITIES CARRIED OUT BY MANUFACPURING COMPANY AND FINANCIAL INSTITUTION
(1) MANUFACTURING COMPANY EQUIPMENT-TRUSTS INFRA-HARD TO FINANCIAL INSTITUTION
(2) FINANCIAL INSTITUTION TRANSFERS TRUST BENEFICIARY RIGHT TO MANUFACTURING COMPANY
(3) SPC IS FOUNDED AND TRUST BENEFICIARY RIGHT IS TRANSFERRED FROM MANUFACTURING COMPANY
(4) SPC ISSUES SECURITIES AND SELLS SECURITIES TO INVESTORS TO RECEIVE PRICE
(5) TRANSFER PRICE OF CREDIT IS PAID FROM SPC TO MANUFACTURING COMPANY
SUPPLY SERVICES TO CLIENT
1120
CARRY OUT OPTIMIZATION OF CHARGE SYSTEM AND CLIENT ASSORTMENT BY USING CLIENT DATA MANAGEMENT SYSTEM
1130
COLLECT CHARGES FROM CLIENTS
1140
REFUND APPOINTED DAY ?
1150
No
Yes
1161
PAY PRINCIPAL/ DIVIDEND FROM SPC TO INVESTORS
PAY LEASE FEE
1160
REFUND DUE DATE ?
1170
No
Yes
PURCHASE INFRA-HARD FROM FINANCIAL INSTITUTION
1180
END

FIG.8

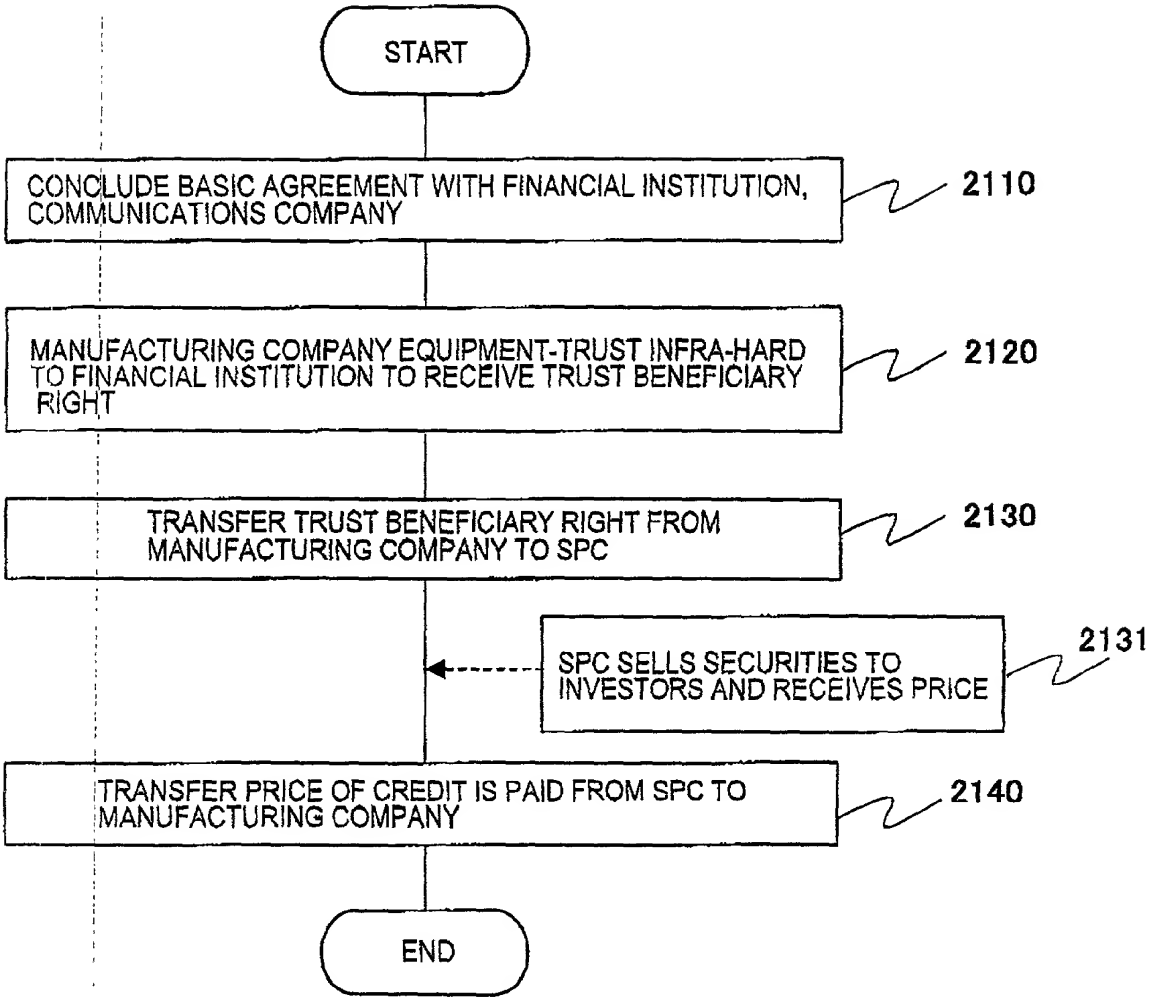

START
CONCLUDE BASIC AGREEMENT WITH FINANCIAL INSTITUTION, COMMUNICATIONS COMPANY
2110
MANUFACTURING COMPANY EQUIPMENT-TRUST INFRA-HARD TO FINANCIAL INSTITUTION TO RECEIVE TRUST BENEFICIARY RIGHT
2120
TRANSFER TRUST BENEFICIARY RIGHT FROM MANUFACTURING COMPANY TO SPC
2130
SPC SELLS SECURITIES TO INVESTORS AND RECEIVES PRICE
2131
TRANSFER PRICE OF CREDIT IS PAID FROM SPC TO MANUFACTURING COMPANY
2140
END

FIG.9

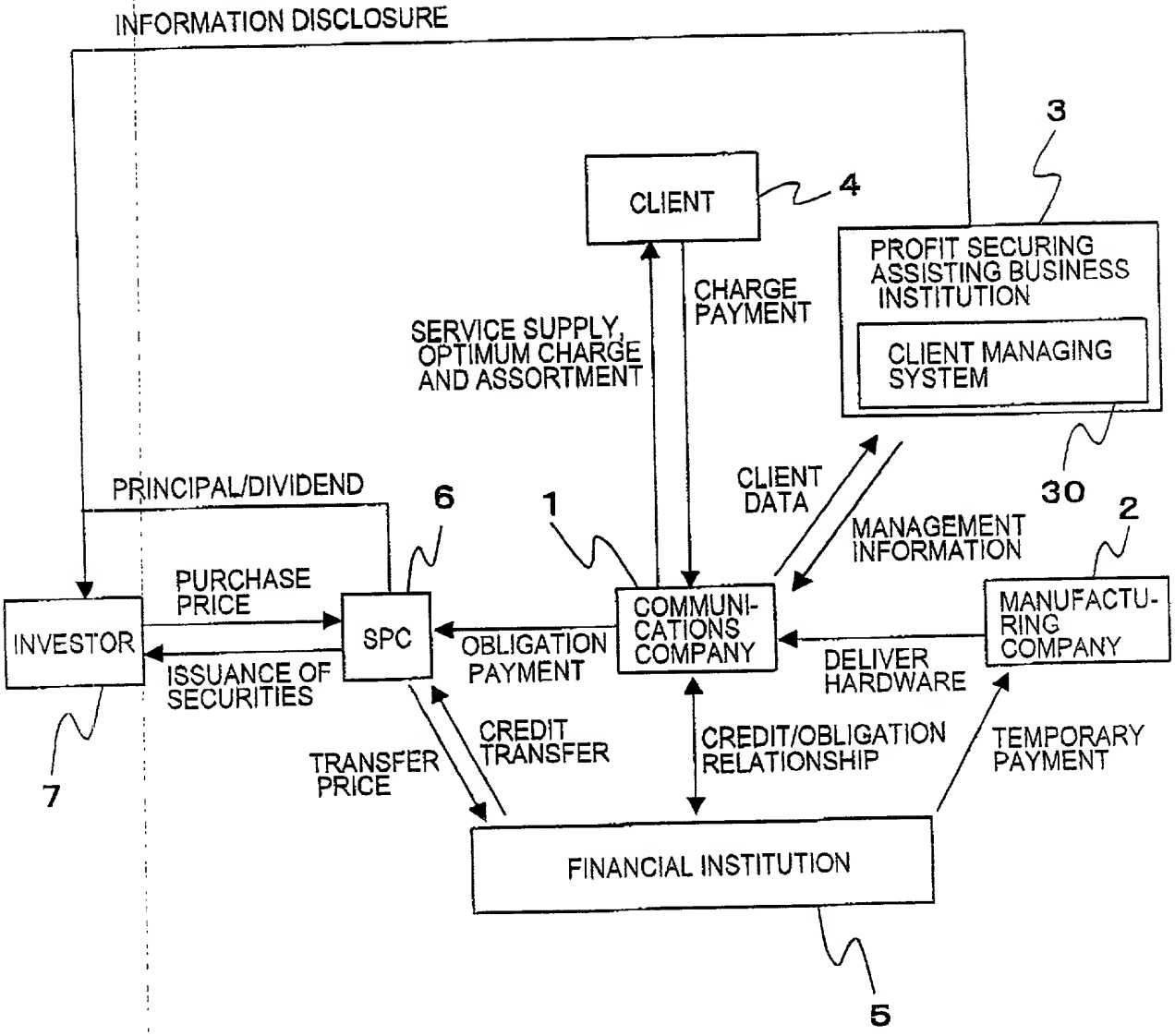

INFORMATION DISCLOSURE
3
CLIENT
4
PROFIT SECURING ASSISTING BUSINESS INSTITUTION
CLIENT MANAGING SYSTEM
30
CHARGE PAYMENT
SERVICE SUPPLY, OPTIMUM CHARGE AND ASSORTMENT
PRINCIPAL/DIVIDEND
6
1
CLIENT DATA
MANAGEMENT INFORMATION
2
PURCHASE PRICE
INVESTOR
SPC
OBLIGATION PAYMENT
COMMUNI-CATIONS COMPANY
MANUFACTU-RING COMPANY
ISSUANCE OF SECURITIES
DELIVER HARDWARE
7
CREDIT TRANSFER
TRANSFER PRICE
CREDIT/OBLIGATION RELATIONSHIP
TEMPORARY PAYMENT
FINANCIAL INSTITUTION
5

FIG.10

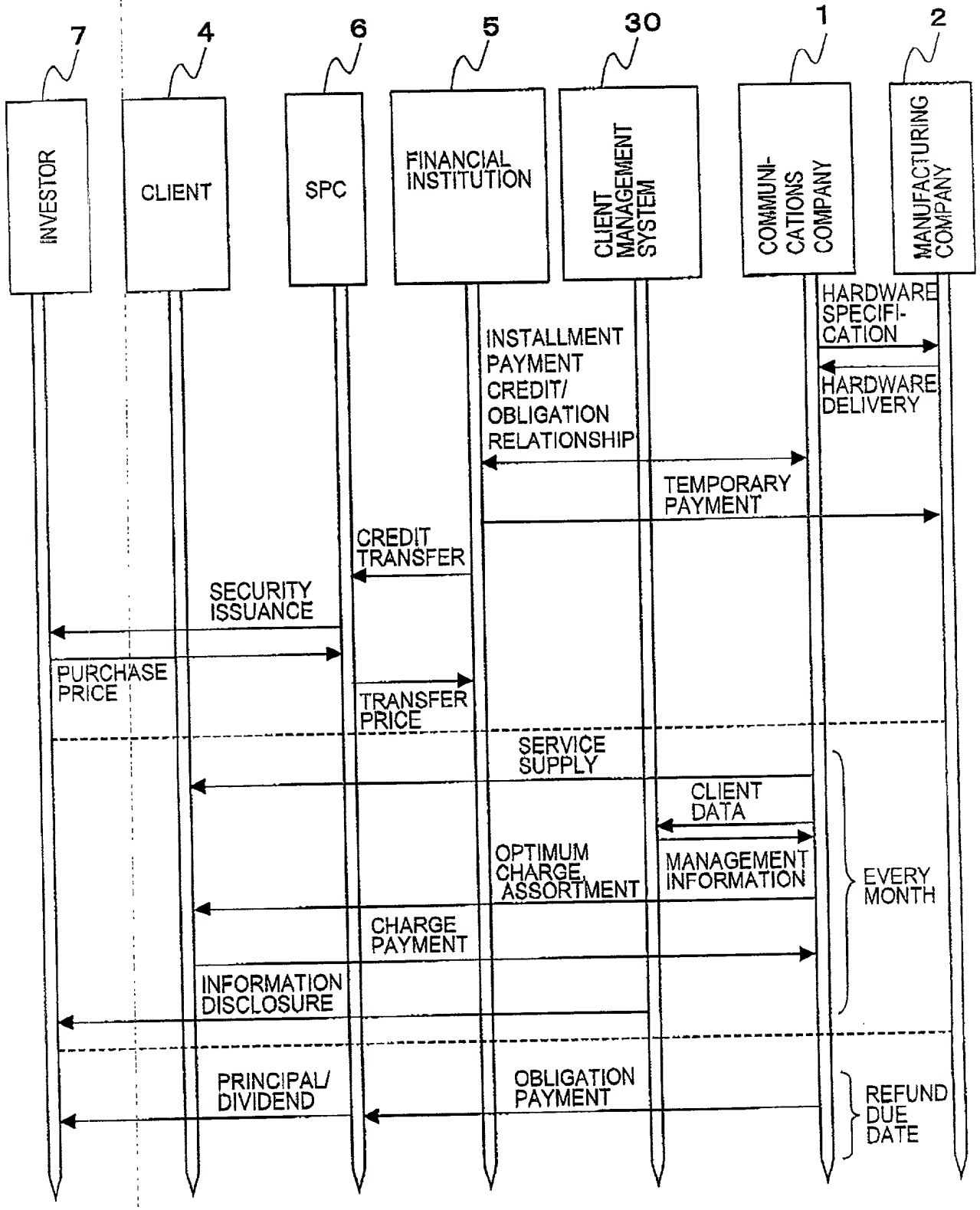

7
4
6
5
30
1
2
INVESTOR
CLIENT
SPC
FINANCIAL INSTITUTION
CLIENT MANAGEMENT SYSTEM
COMMUNI-CATIONS COMPANY
MANUFACTURING COMPANY
HARDWARE SPECIFI-CATION
HARDWARE DELIVERY
INSTALLMENT PAYMENT CREDIT/ OBLIGATION RELATIONSHIP
TEMPORARY PAYMENT
CREDIT TRANSFER
SECURITY ISSUANCE
PURCHASE PRICE
TRANSFER PRICE
SERVICE SUPPLY
CLIENT DATA
MANAGEMENT INFORMATION
OPTIMUM CHARGE ASSORTMENT
CHARGE PAYMENT
INFORMATION DISCLOSURE
EVERY MONTH
PRINCIPAL/ DIVIDEND
OBLIGATION PAYMENT
REFUND DUE DATE

FIG.11

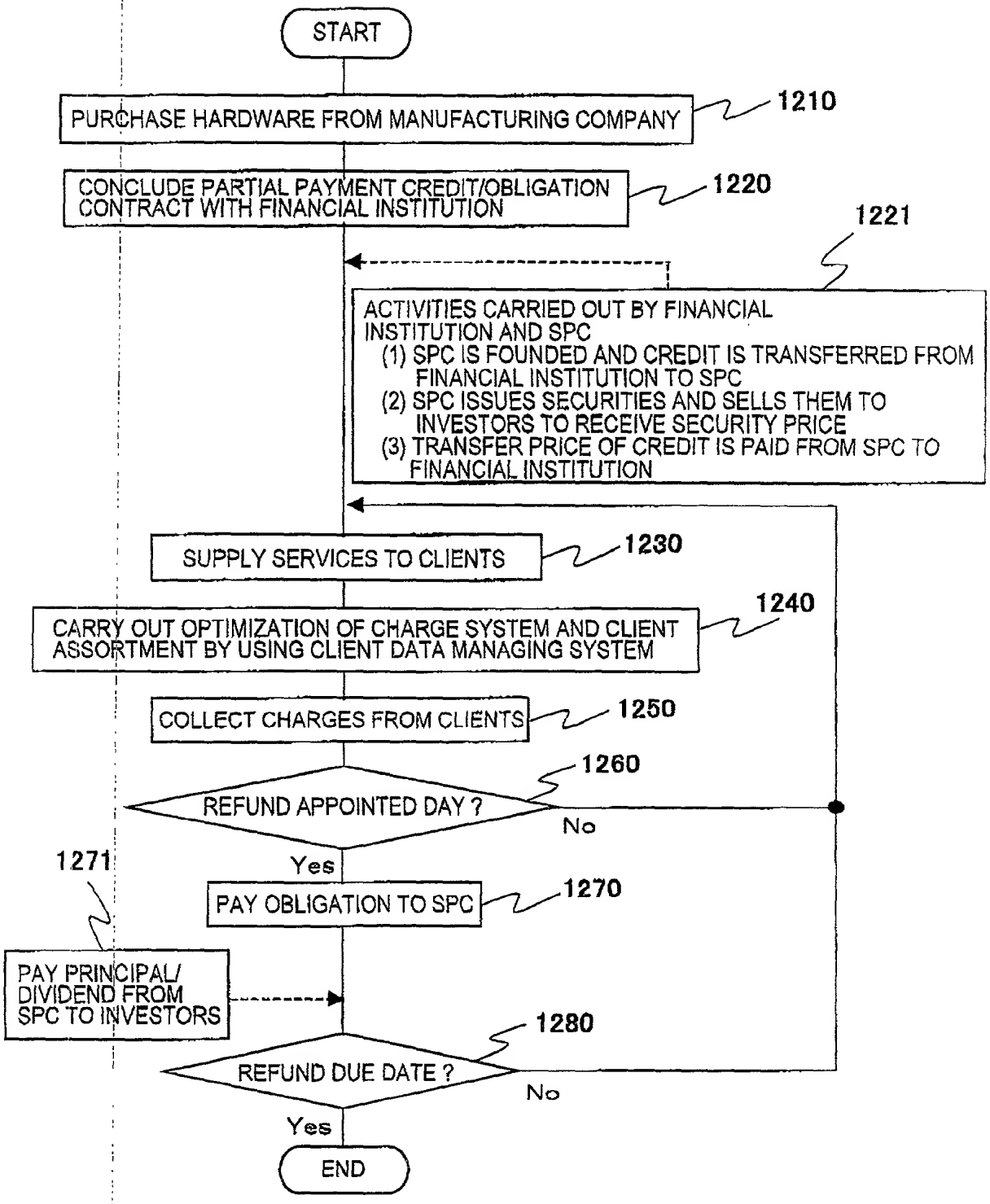

START
PURCHASE HARDWARE FROM MANUFACTURING COMPANY
1210
CONCLUDE PARTIAL PAYMENT CREDIT/OBLIGATION CONTRACT WITH FINANCIAL INSTITUTION
1220
1221
ACTIVITIES CARRIED OUT BY FINANCIAL INSTITUTION AND SPC
(1) SPC IS FOUNDED AND CREDIT IS TRANSFERRED FROM FINANCIAL INSTITUTION TO SPC
(2) SPC ISSUES SECURITIES AND SELLS THEM TO INVESTORS TO RECEIVE SECURITY PRICE
(3) TRANSFER PRICE OF CREDIT IS PAID FROM SPC TO FINANCIAL INSTITUTION
SUPPLY SERVICES TO CLIENTS
1230
CARRY OUT OPTIMIZATION OF CHARGE SYSTEM AND CLIENT ASSORTMENT BY USING CLIENT DATA MANAGING SYSTEM
1240
COLLECT CHARGES FROM CLIENTS
1250
REFUND APPOINTED DAY ?
1260
No
Yes
1271
PAY OBLIGATION TO SPC
1270
PAY PRINCIPAL/ DIVIDEND FROM SPC TO INVESTORS
REFUND DUE DATE ?
1280
No
Yes
END

FIG.12

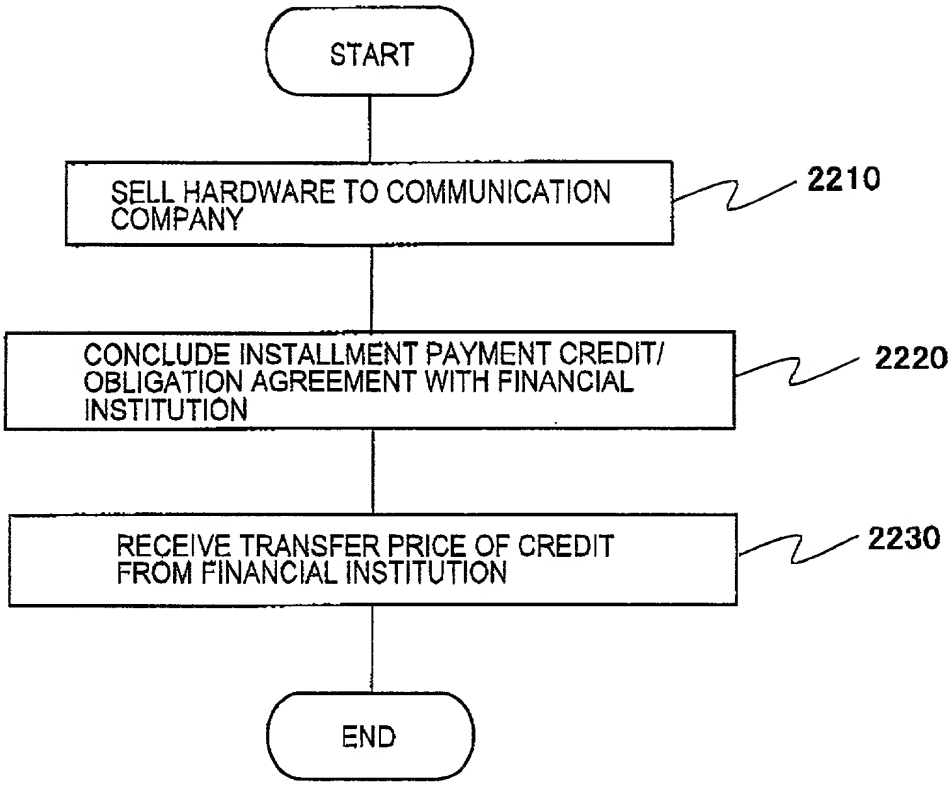

START
SELL HARDWARE TO COMMUNICATION COMPANY
2210
CONCLUDE INSTALLMENT PAYMENT CREDIT/ OBLIGATION AGREEMENT WITH FINANCIAL INSTITUTION
2220
RECEIVE TRANSFER PRICE OF CREDIT FROM FINANCIAL INSTITUTION
2230
END

FIG.13

BENEFICIARY RIGHT	PRINCIPAL	DIVIDEND RATE
PREFERENTIAL CREDIT	F	c
SUBORDINATE CREDIT	F'	—

DIVIDEND RATE : $C_0 < C$ C : INTEREST OF CREDIT HAVING NO RISK

FIG.14

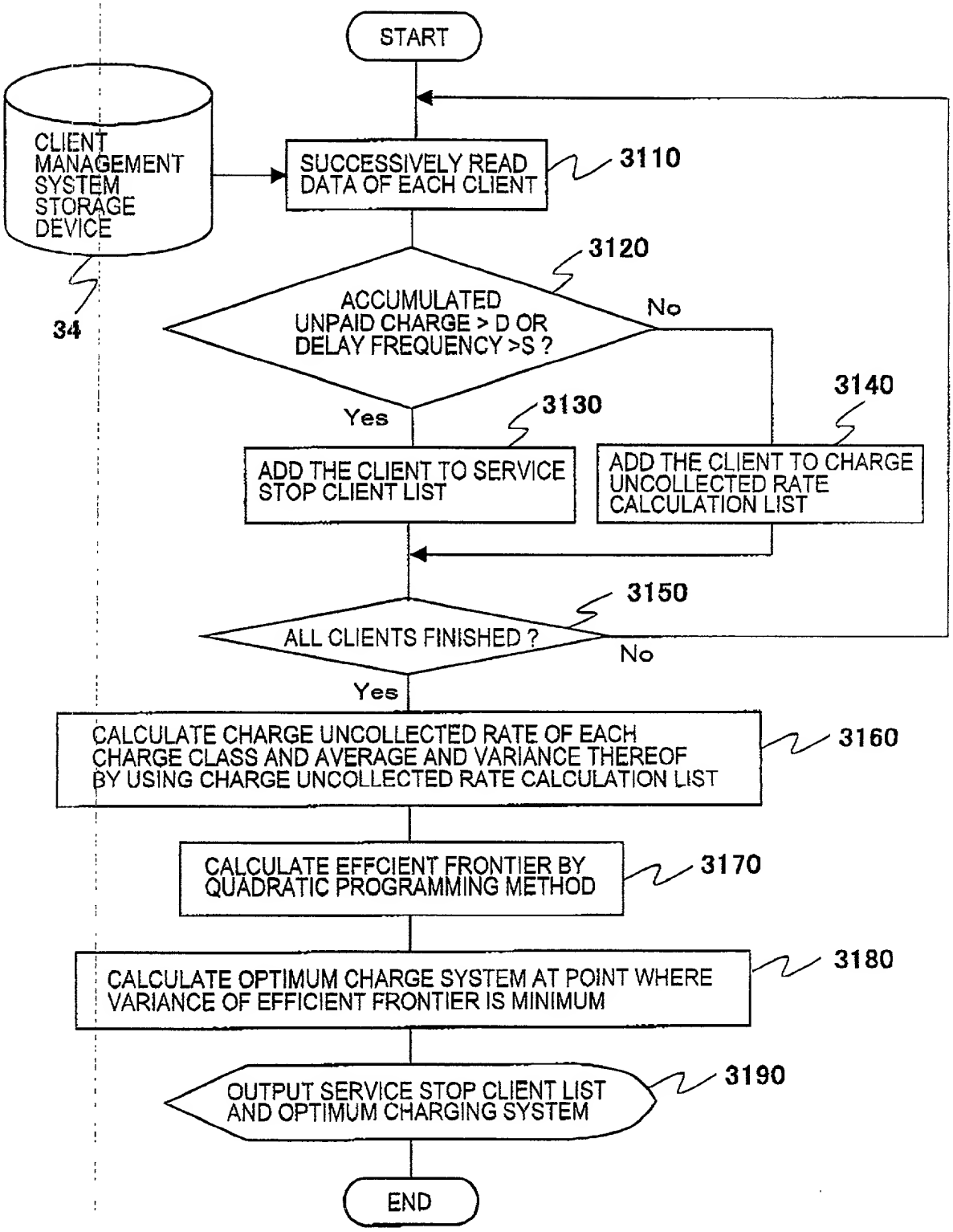

START
CLIENT MANAGEMENT SYSTEM STORAGE DEVICE
34
SUCCESSIVELY READ DATA OF EACH CLIENT
3110
ACCUMULATED UNPAID CHARGE > D OR DELAY FREQUENCY >S ?
3120
No
Yes
3130
ADD THE CLIENT TO SERVICE STOP CLIENT LIST
3140
ADD THE CLIENT TO CHARGE UNCOLLECTED RATE CALCULATION LIST
ALL CLIENTS FINISHED ?
3150
No
Yes
CALCULATE CHARGE UNCOLLECTED RATE OF EACH CHARGE CLASS AND AVERAGE AND VARIANCE THEREOF BY USING CHARGE UNCOLLECTED RATE CALCULATION LIST
3160
CALCULATE EFFCIENT FRONTIER BY QUADRATIC PROGRAMMING METHOD
3170
CALCULATE OPTIMUM CHARGE SYSTEM AT POINT WHERE VARIANCE OF EFFICIENT FRONTIER IS MINIMUM
3180
OUTPUT SERVICE STOP CLIENT LIST AND OPTIMUM CHARGING SYSTEM
3190
END

FIG.15

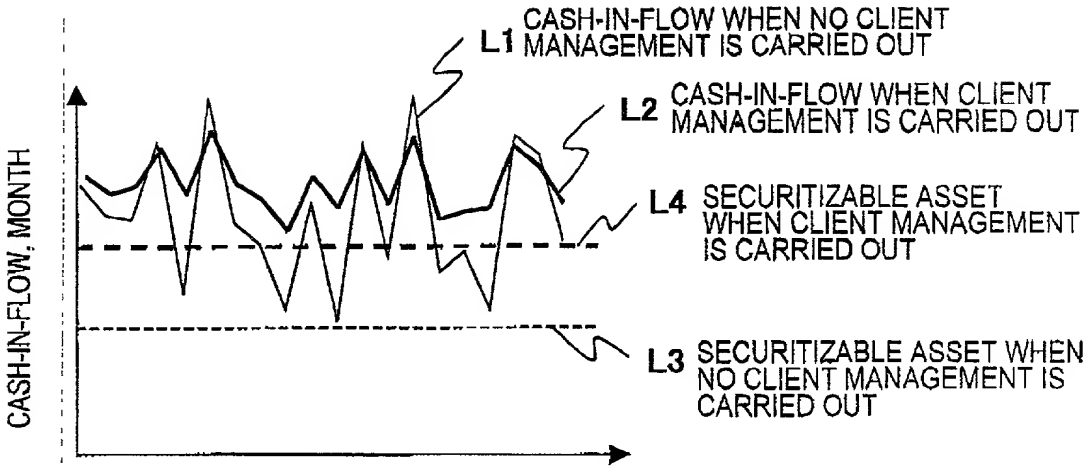

CASH-IN-FLOW, MONTH
L1 CASH-IN-FLOW WHEN NO CLIENT MANAGEMENT IS CARRIED OUT
L2 CASH-IN-FLOW WHEN CLIENT MANAGEMENT IS CARRIED OUT
L4 SECURITIZABLE ASSET WHEN CLIENT MANAGEMENT IS CARRIED OUT
L3 SECURITIZABLE ASSET WHEN NO CLIENT MANAGEMENT IS CARRIED OUT

FIG.16

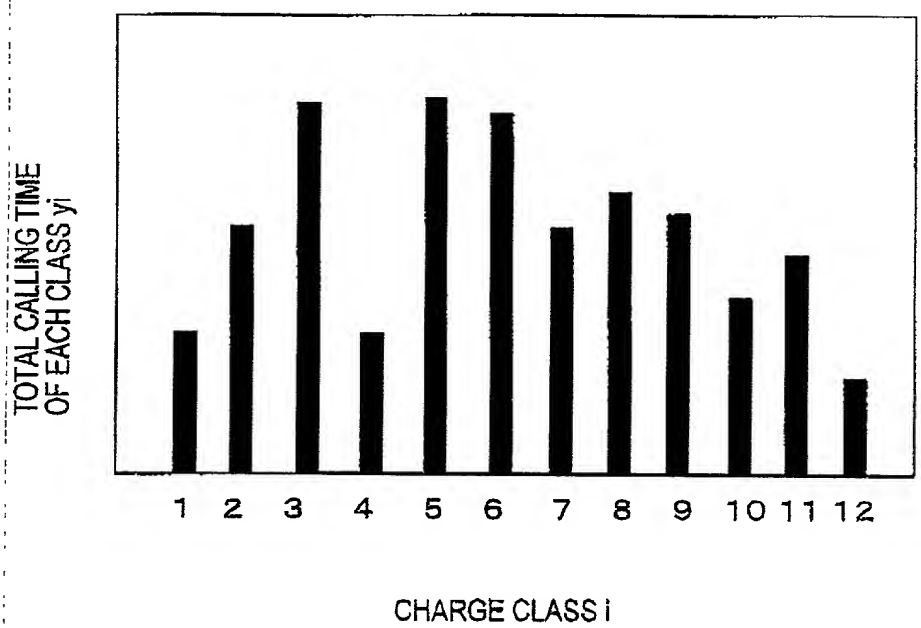

TOTAL CALLING TIME
OF EACH CLASS yi
1 2 3 4 5 6 7 8 9 10 11 12
CHARGE CLASS i

FIG.17

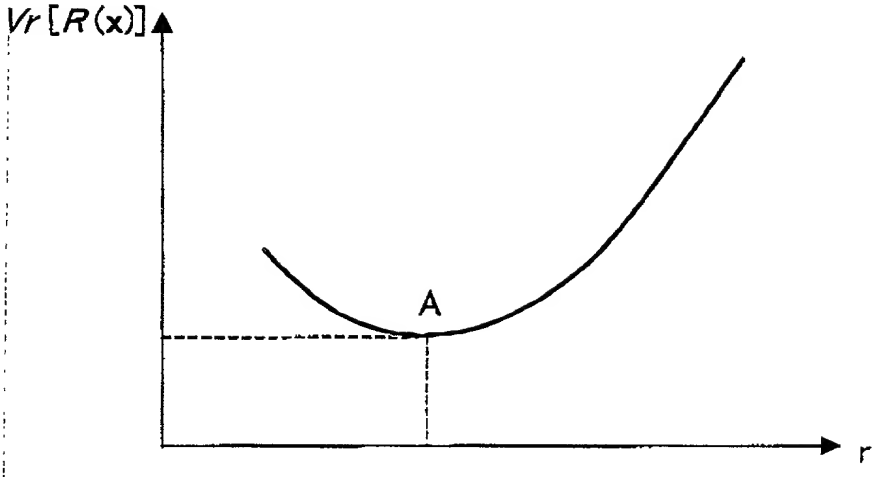
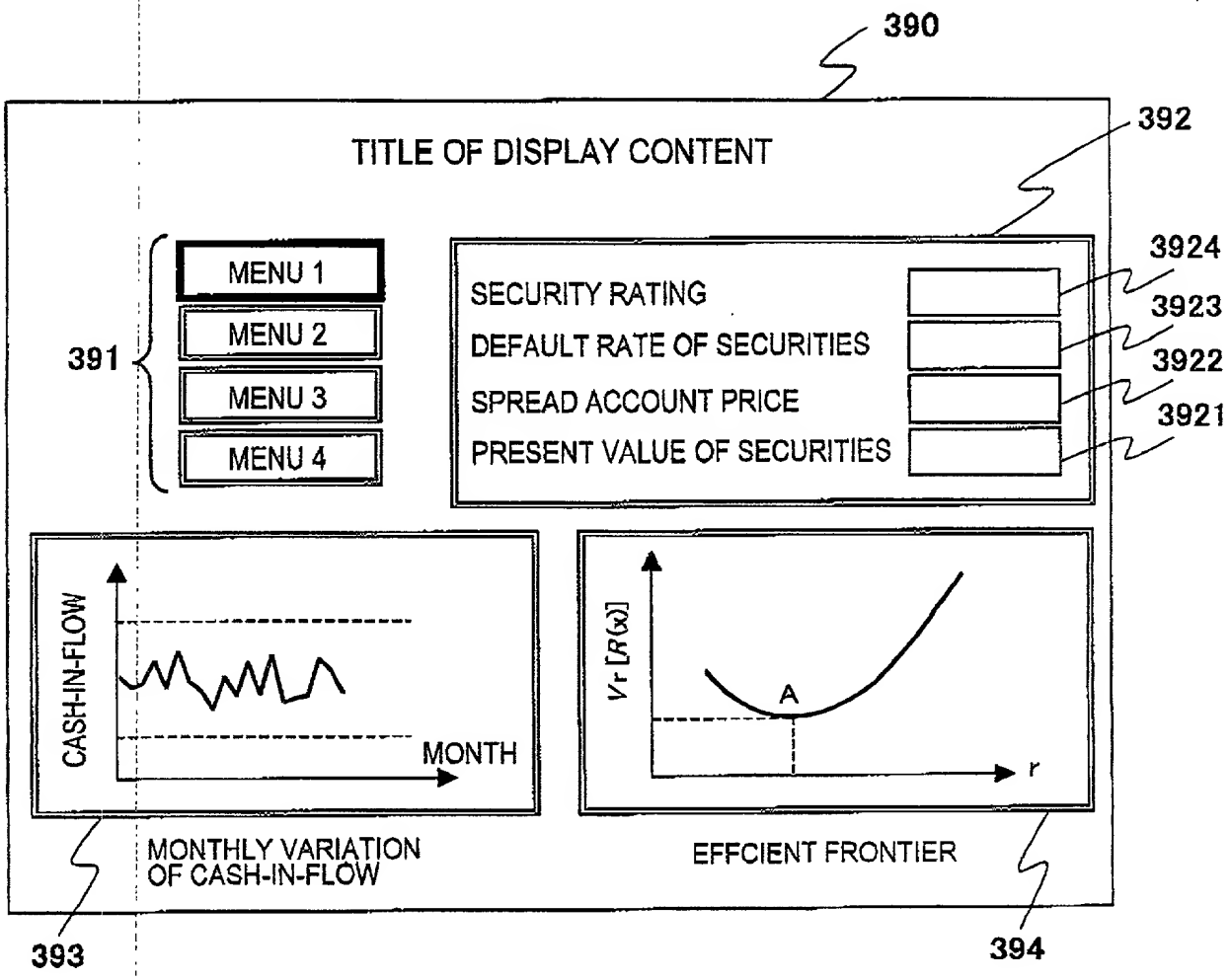


FIG.18


390
TITLE OF DISPLAY CONTENT
392
391
MENU 1
MENU 2
MENU 3
MENU 4
SECURITY RATING
DEFAULT RATE OF SECURITIES
SPREAD ACCOUNT PRICE
PRESENT VALUE OF SECURITIES
3924
3923
3922
3921
CASH-IN-FLOW
MONTH
Vr [R(x)]
A
r
MONTHLY VARIATION OF CASH-IN-FLOW
EFFCIENT FRONTIER
393
394